

DEPARTMENT OF TRANSPORTATION

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March 1, 2002

10-SJ-99-22.6/24.6
10-1A7004
ACNH-P099(429)E
STPL-6210(001)

Addendum No. 4

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in SAN JOAQUIN COUNTY IN AND NEAR STOCKTON FROM 0.9 km SOUTH TO 1.1 km NORTH OF ARCH ROAD OVERCROSSING.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on March 27, 2002. The original bid opening date was previously postponed indefinitely under Addendum No. 3 dated January 17, 2002.

This addendum is being issued to set a new bid opening date as shown herein, and revise the Project Plans, the Notice to Contractors and Special Provisions, and the Proposal and Contract.

Project Plan Sheets 66, 90, 94, 114, 117, 140, 178, 200, 203, 241, 248, 254, 300, 303, 304, 307, 309, 310, 312, 317, 319, 320, 321, 333, 334, 335, 366, 374, 375, 389, and 395 are revised. Half-sized copies of the revised sheets are attached for substitution for the like-numbered sheets.

Project Plan Sheets 214A, 355A, 355B, 355C, 355D, 355E, 355F, 355G, 355H, 355I, and 355J are added. Half-sized copies of the added sheets are attached for addition to the project plans.

Project Plan Sheets 350, 351, and 397 are deleted.

In the Special Provisions, the following Standard Plans are added to the "STANDARD PLANS LIST":

RSP S1	Overhead Signs - Truss, Instructions and Examples
RSP S2	Overhead Signs - Truss, Single Post Type - Post Types II Thru VII
RSP S3	Overhead Signs - Truss, Two Post Type - Post Types I-S Thru VII-S
S4	Overhead Signs - Truss, Single Post Type - Structural Frame Members
RSP S5	Overhead Signs - Truss Two Post Type - Structural Frame Members
RSP S6	Overhead Signs - Truss, Structural Frame Details
RSP S7	Overhead Signs - Truss, Frame Juncture Details
RSP S8A	Overhead Signs - Steel Frames - Removable Sign Panel Frames
S8B	Overhead Signs - Removable Sign Panel Frames - Overhead Formed Panel Mounting Details
S8D	Overhead Signs - Truss, Removable Sign Panel Frames - 2794 mm and 3048 mm Sign Panels

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S9	Overhead Signs - Walkway Details No. 1
RSP S13	Overhead Signs - Truss, Pile Foundation
S15	Overhead Signs - Lightweight, Type A, Connection Details
S18A	Overhead Signs - Lightweight, Sign Panel Mounting Details, Laminated Panel - Type A
S18B	Overhead Signs - Lightweight, Light Fixture Mounting Details
RSP S20A	Overhead Signs - Lightweight, Post Details
RSP S20B	Overhead Signs - Lightweight, Foundation Details

In the Special Provisions, the following Standard Plans are deleted from the "STANDARD PLANS LIST":

RSP S39	Overhead Signs - Box Beam Closed Truss, Foundation Details
S40C	Overhead Signs - Box Beam Closed Truss, Ribbed Sheet Metal Details
S40D	Overhead Signs - Box Beam Closed Truss, Two Post Type, Frame Details
S40G	Overhead Signs - Box Beam Closed Truss, Single Post Type, Frame Members
S40H	Overhead Signs - Box Beam Closed Truss, Single Post Cantilever, Frame Details
S40I	Overhead Signs - Box Beam Closed Truss, Single Post Cantilever, Frame Juncture Details
RSP S40J	Overhead Signs - Box Beam Closed Truss, Single Post Cantilever, Post Details

In the Special Provisions, Section 5-1.25, "MIGRATORY BIRD ACT REQUIREMENTS," is added as attached.

In the Special Provisions, Section 5-1.26, "ENDANGERED SPECIES REQUIREMENTS," is added as attached.

In the Special Provisions, Section 5-1.27, "ENVIRONMENTALLY SENSITIVE AREA," is added as attached.

In the Special Provisions, Section 10-1.015, "MATERIAL CONTAINING AERIALY DEPOSITED LEAD," is added as attached.

In the Special Provisions, Section 10-1.03, "TEMPORARY CULVERTS," the following paragraph is added after the last paragraph:

"Full compensation for furnishing all labor, materials (including rock slope protection and rock slope protection fabric), tools, and equipment and for doing all the work involved (including excavation and backfilling) in constructing, maintaining, removing and disposing of temporary gravel dam shall be considered as included in the contract price paid per meter for temporary culvert and no separate payment will be made therefore."

In the Special Provisions, Section 10-1.27, "CLEARING AND GRUBBING," the following paragraph is added after the second paragraph:

"Vegetation considered as invasive or noxious weeds shall be disposed of in an authorized disposal site"

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In the Special Provisions, Section 10-1.30, "EARTH RETAINING STRUCTURES," the following is added to the list in the third paragraph:

"MSE Plus (SSL)
1710 Scotts Valley Drive, Suit "E"
Scotts Valley, CA 95066
(831) 430-9300"

In the Special Provisions, Section 10-1.51, "ARCHITECTURAL SURFACE (TEXTURED CONCRETE)," is replaced as attached.

In the Special Provisions, Section 10-1.56, "CLEAN AND PAINT STRUCTURAL STEEL," the following paragraph is added after the first paragraph:

"Cleaning and painting of the steel pipe piles at Arch Road Overcrossing (Temporary) will not be required."

In the Special Provisions, Section 10-3.01, "DESCRIPTION," the first paragraph is revised to read as follows:

"Traffic signals, lighting, irrigation controller enclosure cabinets, sign illumination, electric service (irrigation), ramp metering systems, interconnect conduit system, closed circuit television system, emergency vehicle detector system and relocate changeable message sign system shall conform to the provisions in Section 86, "Signals, Lighting and Electrical Systems," of the Standard Specifications and these special provisions."

In the Special Provisions, Section 10-3.07, "CONDUIT," the fourth paragraph is revised to read as follows:

"All conduit installed for fiber optic cable shall include a No. 8 AWG conductor with black insulation and the standard pull rope."

In the Special Provisions, Section 10-3.20, "LIGHT EMITTING DIODE SIGNAL MODULE," in the subsection "ELECTRICAL," the third paragraph is revised to read as follows:

"LED signal module on-board circuitry shall include voltage surge protection to withstand high repetition noise transients in conformance with the requirements in Section 2.1.6 of NEMA Standard TS2-1992. Type 1 LED signal modules shall have internal fuses. (Fusistors shall not be allowed)."

In the Special Provisions, Section 10-3.22, "PEDESTRIAN SIGNAL FACES (CITY)," is deleted.

In the Special Provisions, Section 10-3.23, "LIGHT EMITTING DIODE PEDESTRIAN SIGNAL FACE MODULES," the following paragraph is added after the first paragraph:

"All LED sections shall have internal fuses, fusistors shall not be allowed."

In the Special Provisions, Section 10-3.24, "DETECTORS," the following paragraph is added after the eighth paragraph:

"Detector handholes shall be Type B traffic rated lid detector handholes, per Brooks product No. 4-TT or equivalent."

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In the Special Provisions, Section 10-3.26, "EMERGENCY VEHICLE DETECTOR SYSTEM (CITY)," the second paragraph is revised to read as follows:

"The emergency vehicle detector receivers shall be installed on the traffic signal mast arms."

In the Special Provisions, Section 10-3.31, "INTERNALLY ILLUMINATED RAISED PAVEMENT MARKERS," in the subsection "OPERATION," the following paragraph is added after the first paragraph:

"The IIRPM's shall be wired such that strobe sequencing is also possible - the effect of runway approach lights to draw motorists along the intended path."

In the Special Provisions, Section 10-3.33, "FIBER OPTIC COMMUNICATION CABLE PLANT," the following paragraph is added after the section title:

"Fiber optic cable shall be supplied and installed by others. The Contractor shall be responsible for installing conduit with a No. 8 AWG conductor with black insulation and the standard pull rope as shown on the plans and described elsewhere in these special provisions."

In the Special Provisions, Section 10-3.33, "FIBER OPTIC COMMUNICATION CABLE PLANT," in the subsection "PAYMENTS," the paragraph is revised to read as follows:

"Full compensation for conforming to the provisions in this section for the installation of conduit and installing a No. 8 AWG conductor with black insulation and the standard pull rope shall be considered as included in the contract lump sum price paid for interconnect conduit system and no additional compensation will be allowed therefor."

In the Special Provisions, Section 10-3.34, "CLOSED CIRCUIT TELEVISION EQUIPMENT," in the subsection "FIBER OPTIC VIDEO MODEMS FOR PAN/TILT/ZOOM CAMERA," the paragraph is revised to read as follows:

"The Contractor shall supply two video and data transceivers. One video and data transceiver for field and communications cabinets located at Airport Way and Ralph Avenue for each CCTV location. The following video/data transceivers shall meet the following requirements:

- a. Central Video/Data Modem: IFS VR4930 WDM-R3 FM receiver/data transceiver 1300/1550 mm, one single mode fiber (rack mounted), or accepted equivalent.
- b. Field Video/Data Modem: IFS VT4930 WDM FM video transmitter/data transceiver 1300/1550 mm, one singlemode fiber (shelf mount - for field installation), or accepted equivalent
- c. Various modem mounting hardware, power supply and cables.
- d. Other accessories as required."

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In the Special Provisions, Section 10-3.35, "COMMUNICATION EQUIPMENT," in the subsection "FIBER OPTIC DATA MODEMS," the title, first sentence and item No. 1 are revised to read as follows:

"Asynchronous Fiber Optic Data Modems

The Contractor shall supply two data transceivers. One data transceiver for field and communications cabinets located at Airport Way and Ralph Avenue for each signal location:

1. International Fiber Systems RS-232 single mode optical transceiver D9130-E, or accepted equivalent (for field cabinet installation)."

In the Special Provisions, Section 10-3.35, "COMMUNICATION EQUIPMENT," in the subsection "TRAFFIC MANAGEMENT CENTER INSTALLATION," the title and first sentence is revised to read as follows:

"Communications Cabinet Installation - Airport Way and Ralph Avenue

One of the two IFS video/data transceivers supplied by the Contractor for each CCTV installation shall be given to the Engineer. One of the two data transceivers supplied by the Contractor for each signal location shall be given to the Engineer. Others will install the IFS video/data transceiver and data transceiver supplied by the Contractor to the Engineer in the communications cabinet. The other IFS video/data transceivers and data transceivers shall be installed in the CCTV or traffic signal field cabinets by the Contractor."

In the Special Provisions, Section 10-3.36, "SYSTEM TESTING AND DOCUMENTATION," in the subsection "VIDEO LINK TESTING," the second paragraph is revised to read as follows:

"Measurements shall be made from the baseband-in to baseband-out connections. A video communications link shall include a TVCR at the CCTV assembly, TVCR at the Communication Hub, interconnecting optical fiber, connectors and power supplies. A video communications link shall include a TVCR at the CCTV assembly, TVCR at the communication cabinet, interconnecting optical fiber, connectors and power supplies."

In the Special Provisions, Section 10-3.36, "SYSTEM TESTING AND DOCUMENTATION," in the subsection "TEST RESULTS," the last sentence of paragraph two is revised to read as follows:

"A comprehensive list of cabling and wiring shall be provided to clearly identify the interconnection and labeling of all equipment supplied under this contract, State-furnished or existing both in the field and at the communication cabinet."

In the Special Provisions, Section 10-3.36, "SYSTEM TESTING AND DOCUMENTATION," the subsection "PAYMENT," is revised to read as follows:

"The contract lump sum price paid for system testing and documentation shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in system testing and documentation, complete in place, including testing at the traffic management center, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer."

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In the Special Provisions, Section 10-3.37, "PAYMENT," the third paragraph is revised to read as follows:

"The contract lump sum price paid for interconnect conduit system shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in interconnect conduit system, complete in place, including conduits, conductors, pull ropes, splice vaults and pull boxes for the fiber optic system, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer."

In the Proposal and Contract, the Engineer's Estimate Items 18, 19, 108, 109, 110, 111, 116, 179, and 181 are revised, Items 186, 187, 188, 189, and 190 are added, and Items 178 and 185 are deleted as attached.

To Proposal and Contract book holders:

Replace pages 3, 8, 11, and 12 of the Engineer's Estimate in the Proposal with the attached revised pages 3, 8, 11, and 12 of the Engineer's Estimate. The revised Engineer's Estimate is to be used in the bid.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the proposal.

Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

REBECCA D. HARNAGEL, Chief
Office of Plans, Specifications & Estimates
Office Engineer

Attachments

5-1.25 MIGRATORY BIRD ACT REQUIREMENTS

It is anticipated that migratory birds may try to nest in the vegetation (trees, tall grass, and shrubs) throughout the project between February 1 and August 30. If any clearing of vegetation is anticipated in nesting areas during this period, the Contractor, prior to March 1, shall install exclusionary devices such as netting to prevent nesting. If new nests are built and become occupied, no work that would interfere with or discourage migratory birds from returning to their nests will be permitted. No extension of time nor compensation will be granted for a suspension of work due to nesting migratory birds. Full compensation for preventing nesting shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

5-1.26 ENDANGERED SPECIES REQUIREMENTS

There is the possibility of swainson's hawk nesting within the project limits beginning March 15. If nesting occurs, to avoid disturbance to the nesting site during incubation, nesting and the fledgling period (by equipment and construction activity), the Engineer will suspend all of the work until three weeks after the chicks have fledged, which is approximately mid-August. No discouraging of nesting will be allowed.

There is the possibility of burrowing owls within the project limits. All burrows larger than 100 mm will be checked and filled to discourage nesting. If an active nest is found within the project limits between February 1 and August 30, the Engineer will suspend all work in the area.

The days on which the suspensions are in effect shall not be considered working days as defined in Section 8-1.06, "Time of Completion," of the Standard Specifications.

The Contractor shall have no claim for damage or compensation for any delay or hindrance caused by the suspension for swainson's hawk or burrowing owl nesting.

5-1.27 ENVIRONMENTALLY SENSITIVE AREA

Environmentally Sensitive Area (ESA) will be established at the New Weber Slough and North Little Johns Creek. The exact location of the boundaries of the ESA, will be determined by the Engineer

Prior to commencing any work near the environmentally sensitive areas, the Contractor shall place temporary environmental fence around the boundaries of the designated areas. The temporary environmental fence shall be maintained for the duration of the project.

The Contractor shall take precautionary measures, including giving written notice to his employees and subcontractors, to ensure that his forces, employees or subcontractors do not enter or disturb these areas unless specifically authorized in writing by the Engineer.

Full compensation for placing temporary environmental fencing shall be considered as included in the various contract items of work and no separate payment will be made therefor.

10-1.015 MATERIAL CONTAINING AERIALY DEPOSITED LEAD

This work shall consist of handling material contaminated by aerially deposited lead in conformance with the Standard Specifications and these special provisions.

Aerially deposited lead is typically found within the top 0.6-m of material in unpaved areas within the highway right of way. Levels of lead found near the project limits range from less than 1.0 to >1,000 mg/kg total lead with an average concentration of unknown mg/kg total lead, as analyzed by EPA Test Method 6010 or EPA Test Method 7000 series.

After the Contractor has completed handling materials containing aerially deposited lead, in conformance with the plans, Standard Specifications, and these special provisions, the Contractor shall have no responsibility for such materials in place and shall not be obligated for further cleanup, removal, or remedial actions for such materials.

Handling material containing aerially deposited lead shall be in conformance with rules and regulations including, but not limited to, those of the following agencies:

California Division of Occupational Safety and Health Administration (Cal-OSHA)
California Regional Water Quality Control Board, Region 5.

Full compensation for conforming to the requirements of this section, except for the Lead Compliance Plan, shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

LEAD COMPLIANCE PLAN

The Contractor shall prepare a project specific Lead Compliance Plan to prevent or minimize worker exposure to lead while handling material containing aerially deposited lead. Attention is directed to Title 8, California Code of Regulations, Section 1532.1, "Lead," for specific Cal-OSHA requirements when working with lead.

The Lead Compliance Plan shall contain the elements listed in Title 8, California Code of Regulations, Section 1532.1(e)(2)(B). Before submission to the Engineer, the Lead Compliance Plan shall be approved by an Industrial Hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene. The Plan shall be submitted to the Engineer at least 7 days prior to beginning work in areas containing aerially deposited lead.

Prior to performing work in areas containing lead, personnel who have no prior training, including State personnel, shall complete a safety training program provided by the Contractor, that meets the requirements of Title 8, California Code of Regulations, Section 1532.1, "Lead," and the Contractor's Lead Compliance Program.

Personal protective equipment, training, and washing facilities, required by the Contractor's Lead Compliance Plan shall be supplied to State personnel by the Contractor. The number of State personnel will be 5.

The contract lump sum price paid for Lead Compliance Plan shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in preparing the Lead Compliance Plan, including paying the Certified Industrial Hygienist, and for providing personal protective equipment, training and medical surveillance, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

SOIL HANDLING

Handling of materials containing aerially deposited lead shall result in no visible dust migration. The Contractor shall have a means of dust control available at all times while handling material in work areas containing aerially deposited lead.

The Contractor shall separate material from vegetation and the soils shall remain on site. This will not be required for vegetation removal performed during plant establishment.

Surplus material excavated from areas containing aerially deposited lead shall remain in the area of soil disturbance. The surplus soil shall not be disposed of outside the highway right of way.

Full compensation for handling material contaminated with aerially deposited lead, except as otherwise provided, shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

Vegetation considered as invasive and/or noxious weeds shall be disposed of in an authorized disposal site.

10-1.51 ARCHITECTURAL SURFACE (TEXTURED CONCRETE)

Architectural texture for concrete surfaces shall conform to the details shown on the plans and the provisions in Section 51, "Concrete Structures," of the Standard Specifications and these special provisions.

Architectural textures listed below are required at concrete surfaces shown on the plans:

- A. Heavy blast texture
- B. Formed relief texture

The heavy abrasive blast texture shall be an architectural texture accomplished by abrasive blasting the surface of the concrete to produce a uniform color and aggregate texture with air and water bubbles in the concrete partially exposed. The abrasive blasting for the architectural texture shall be performed between 7 and 14 days after the concrete has been placed.

The architectural texture shall simulate a formed relief constructed to the dimensions and shapes shown on the plans. Corners at the intersection of plane surfaces shall be sharp and crisp without easing or rounding. A Class 1 surface finish shall be applied to the architectural texture.

TEST PANEL

A test panel at least 1.25 m x 1.25 m in size shall be successfully completed at a location approved by the Engineer before beginning work on architectural textures. The test panel shall be constructed and finished with the materials, tools, equipment and methods to be used in constructing the architectural texture. If ordered by the Engineer, additional test panels shall be constructed and finished until the specified finish, texture and color are obtained, as determined by the Engineer.

The test panel approved by the Engineer shall be used as the standard of comparison in determining acceptability of architectural texture for concrete surfaces.

CURING

Concrete surfaces with architectural texture shall be cured only by the forms-in-place or water methods. Seals and curing compounds shall not be used.

PAYMENT

Full compensation for heavy blast and formed relief textures on retaining walls shall be considered as included in the contract price paid per cubic meter for structural concrete, retaining wall and no separate payment will be made therefore.

Full compensation for heavy blast architectural texture on columns and wingwalls shall be considered as included in the contract price paid per cubic meter for structural concrete, bridge and no separate payment will be made therefor.

Full compensation for heavy blast architectural texture on concrete barriers shall be considered as included in the contract price paid per meter for concrete barrier (Type 27) (modified) and no separate payment will be made therefor.

ENGINEER'S ESTIMATE

10-1A7004

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
1	070012	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	LUMP SUM	LUMP SUM	
2	070018	TIME-RELATED OVERHEAD	WDAY	500		
3	022902	50 MM TEMPORARY POLYVINYL CHLORIDE WATER PIPE	M	27		
4	073029	600 MM TEMPORARY CULVERT	M	110		
5	074019	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	LUMP SUM	LUMP SUM	
6	074020	WATER POLLUTION CONTROL	LS	LUMP SUM	LUMP SUM	
7 (S)	120090	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	LUMP SUM	
8 (S)	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	LUMP SUM	
9 (S)	120116	TYPE II BARRICADE	EA	5		
10 (S)	120120	TYPE III BARRICADE	EA	79		
11 (S)	120149	TEMPORARY PAVEMENT MARKING (PAINT)	M2	28		
12 (S)	120151	TEMPORARY TRAFFIC STRIPE (TAPE)	M	2040		
13 (S)	120152	TEMPORARY PAVEMENT MARKING (TAPE)	M2	45		
14 (S)	120159	TEMPORARY TRAFFIC STRIPE (PAINT)	M	35 300		
15 (S)	120165	CHANNELIZER (SURFACE MOUNTED)	EA	1430		
16 (S)	120300	TEMPORARY PAVEMENT MARKER	EA	5950		
17 (S)	128650	PORTABLE CHANGEABLE MESSAGE SIGN	LS	LUMP SUM	LUMP SUM	
18 (S)	129000	TEMPORARY RAILING (TYPE K)	M	14 900		
19 (S)	129100	TEMPORARY CRASH CUSHION MODULE	EA	220		
20 (S)	129150	TEMPORARY TRAFFIC SCREEN	M	6310		

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Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
101 (S-F)	022908	BAR REINFORCING STEEL (WINGWALL)	KG	3836		
102 (S-F)	520102	BAR REINFORCING STEEL (BRIDGE)	KG	687 300		
103 (S-F)	520103	BAR REINFORCING STEEL (RETAINING WALL)	KG	34 942		
104 (S-F)	520107	BAR REINFORCING STEEL (BOX CULVERT)	KG	36 782		
105 (S-F)	550102	STRUCTURAL STEEL (BRIDGE)	KG	75 500		
106 (F)	560203	FURNISH SIGN STRUCTURE (BRIDGE MOUNTED WITH WALKWAY)	KG	1410		
107 (S-F)	560204	INSTALL SIGN STRUCTURE (BRIDGE MOUNTED WITH WALKWAY)	KG	1410		
108 (F)	560218	FURNISH SIGN STRUCTURE (TRUSS)	KG	4110		
109 (S-F)	560219	INSTALL SIGN STRUCTURE (TRUSS)	KG	4110		
110 (S)	561008	760 MM CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	M	8		
111 (S)	561009	920 MM CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	M	16		
112	566011	ROADSIDE SIGN - ONE POST	EA	39		
113	566012	ROADSIDE SIGN - TWO POST	EA	6		
114	568001	INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	1		
115	620909	450 MM ALTERNATIVE PIPE CULVERT	M	500		
116	620913	600 MM ALTERNATIVE PIPE CULVERT	M	2450		
117	620924	900 MM ALTERNATIVE PIPE CULVERT	M	48		
118	650067	300 MM REINFORCED CONCRETE PIPE	M	400		
119	650069	450 MM REINFORCED CONCRETE PIPE	M	810		
120	650075	600 MM REINFORCED CONCRETE PIPE	M	550		

ENGINEER'S ESTIMATE

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Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
161	839701	CONCRETE BARRIER (TYPE 60)	M	580		
162 (F)	839702	CONCRETE BARRIER (TYPE 60A)	M	161		
163	839703	CONCRETE BARRIER (TYPE 60C)	M	490		
164	839704	CONCRETE BARRIER (TYPE 60D)	M	230		
165 (S)	840515	THERMOPLASTIC PAVEMENT MARKING	M2	340		
166 (S)	840656	PAINT TRAFFIC STRIPE (2-COAT)	M	23 100		
167 (S)	850101	PAVEMENT MARKER (NON-REFLECTIVE)	EA	8860		
168 (S)	850111	PAVEMENT MARKER (RETROREFLECTIVE)	EA	2780		
169 (S)	022913	RAMP METERING (LOCATION 1)	LS	LUMP SUM	LUMP SUM	
170 (S)	022914	RAMP METERING (LOCATION 2)	LS	LUMP SUM	LUMP SUM	
171 (S)	860251	SIGNAL AND LIGHTING (LOCATION 1)	LS	LUMP SUM	LUMP SUM	
172 (S)	860252	SIGNAL AND LIGHTING (LOCATION 2)	LS	LUMP SUM	LUMP SUM	
173 (S)	022915	SIGNAL AND LIGHTING (CITY)	LS	LUMP SUM	LUMP SUM	
174 (S)	860402	LIGHTING (CITY)	LS	LUMP SUM	LUMP SUM	
175 (S)	860460	LIGHTING AND SIGN ILLUMINATION	LS	LUMP SUM	LUMP SUM	
176 (S)	022916	RELOCATE CHANGEABLE MESSAGE SIGN SYSTEM	LS	LUMP SUM	LUMP SUM	
177 (S)	860640	IRRIGATION CONTROLLER ENCLOSURE CABINET (SINGLE)	EA	2		
178	BLANK					
179 (S)	022917	INTERCONNECT CONDUIT SYSTEM	LS	LUMP SUM	LUMP SUM	
180 (S)	860797	ELECTRIC SERVICE (IRRIGATION)	LS	LUMP SUM	LUMP SUM	

ENGINEER'S ESTIMATE**10-1A7004**

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
181 (S)	022919	IRRIGATION CONTROLLER ENCLOSURE CABINET (DOUBLE)	EA	2		
182 (S)	022920	EMERGENCY VEHICLE DETECTOR SYSTEM (CITY)	LS	LUMP SUM	LUMP SUM	
183 (S)	860990	CLOSED CIRCUIT TELEVISION SYSTEM	LS	LUMP SUM	LUMP SUM	
184 (S)	022921	PRECAST CONCRETE PAVERS	M2	2800		
185	BLANK					
186 (F)	560213	FURNISH SIGN STRUCTURE (LIGHTWEIGHT)	KG	5900		
187 (S-F)	560214	INSTALL SIGN STRUCTURE (LIGHTWEIGHT)	KG	5900		
188	590115	CLEAN AND PAINT STRUCTURAL STEEL	LS	LUMP SUM	LUMP SUM	
189 (S)	860752	SYSTEM TESTING AND DOCUMENTATION	LS	LUMP SUM	LUMP SUM	
190	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID: _____